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*SCHOOL HOUSES FOR THE COUNTRY.**



A SMALL school may be well accommodated by a plan like that represented in Fig. 1. It consists of a school-room with a single porch in front, and a wood-house in the rear. The room represented contains seats for twenty-four pupils, but by increasing the length three feet there will be room for one more row of seats, and for thirty pupils, and by increasing its width four feet, it will contain still another row of desks, and seats for forty pupils.

The porch is a single room, but of sufficient size for a lobby for cloaks and hats. The stove is to be placed in one of the niches in front, while the other niche may be used for a library. The venti-

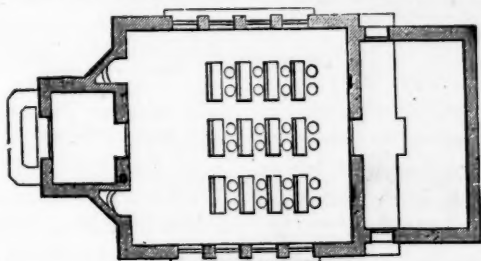


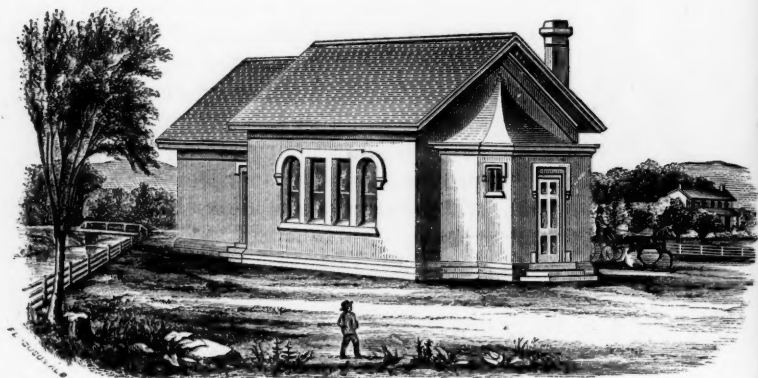
Fig. 1. Ground Plan.

* From *Johannot's Complete Work on "School Houses."*

lators in this, as in all the designs, are placed in the rear of the room, but each one is connected with the chimney by a tube under the floor.

The wood-house in the rear serves the double purpose of back hall or entry-way and a place of storage for fuel. The doors upon the sides should open respectively into the boys' and girls' play-grounds. The front part of the wood-house should be provided with a platform upon a level with the school-house floor, at least four feet wide.

This general plan is superior to that shown in our January monthly, in having back as well as front entrances, so that access may be had to the play-grounds and out-buildings without disturbance to classes, or to the general order of the school-room. The movements of pupils are not so conspicuous as they would be if, in their entrance and exit, they were always obliged to pass through the front door.



Elevation 1.

ELEVATION No. 1.—This elevation is a simple and inexpensive building, with wide projecting eaves that give to it an appearance of comfort and solidity. The porch is finished with a tent-roof, to obviate the necessity of a gable under a gable. It is lighted by small windows in the sides, as the height of the roof would hardly admit of a head-window over the door. The windows are grouped together, and the whole design produces a very pleasing effect.

If a larger house is built upon this plan, the outside appearance may remain the same by simply increasing all the parts in proportion. If three feet be added to the length no other change need be made, but if the addition is made to the width the porch should be enlarged in proportion.

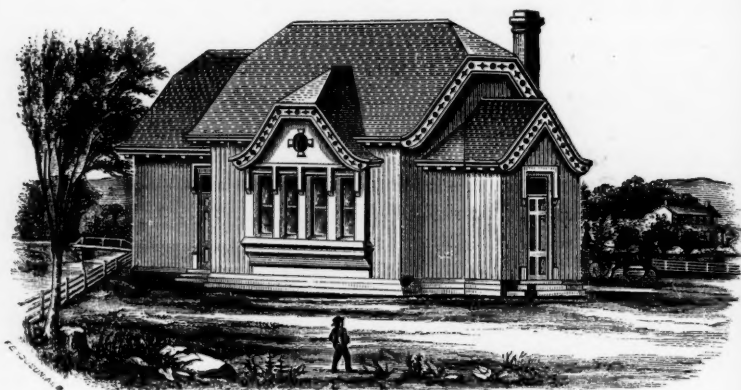
ELEVATION No. 2.—In this elevation the roof of the main building is placed at right angles with the roof of the porch and of the wood-house, giving a fine architectural effect to the group. The cornices of the three parts are upon the same level, and an ornamental cornice extends across the gable. This feature may be omitted. In case the gable cornice is



Elevation 2.

omitted the cornices of the porch and wood-house should drop below that of the main building. The porch is lighted by a head-light above the door. The materials of this building may be either brick or wood.

ELEVATION No. 3.—This elevation is more ornamental. The corners of the gable are cut off, and a small gable is erected over each of the large windows in the sides. The porch is finished with a common gable. The ornamental filigree work of the gables may be omitted, and the cornice made wide and plain, like that of Elevation No. 1. The only extra cost of this elevation is raising the gables over the windows, and in cutting down the corners of the roof, the whole of which ought not to exceed a few dollars. This

**Elevation 3.**

elevation is represented as finished with battens, but clap-boards may be used, or the house may be built of brick. The superior appearance of this design will more than warrant the additional expense.

ELEVATION No. 4.—In villages and country places near cities, where the dwellings are of fine architectural appearance, the school-house should be in harmony with the surroundings, and there is a demand for ornamental designs. Elevation No. 4 has been prepared to meet this demand when a small school-house is wanted. The general features are Gothic, but the whole is chaste and neat and not excessively expensive. The steep gables all terminate in minarets or pinnacles. An ornamental bell-tower surmounts the front. The porch has an ornamental tent-roof, sloping down from the front gable. Gables are erected above the side windows, and a beautiful ornamental chimney extends upward from one side of the porch. The material may be brick or stone, the finish of the gables being a stone coping instead of a cornice. This coping may be made of wood with a covering of tin. This elevation might also be used as a session-room for a church, and for a variety of other public purposes. The roof should be covered with slate.

In some parts of the country the small number of pupils in the district is given as an excuse for a miserable school-house. The fact of a limited number of pupils may be a

sufficient reason for the construction of a small school-house, but not for a poor one. The educational wants of a small district and of a small number of children are just as pressing as though the territory and the number were indefinitely increased, and a neglect to supply them is just as detrimental in the one case as in the other. If this excuse were a good one, the State would be justified in withholding the public funds on the same ground.

But, again, it is argued that the smaller districts are often too poor to erect a respectable appearing and com-



Elevation 4.

fortable school-house. It may be that many of the districts are very poor, and in that case they are far too poor to subject their children to exposures and consequent disease, and so a good school-house becomes indispensable. Each district that partakes of the public money of the State is morally bound to provide all the appliances necessary for the proper expenditure of the money so obtained; and the poorer the district the greater is the necessity for all possible means for moral and physical advancement.

NATURAL SCIENCE IN DISTRICT SCHOOLS.

[THE following is an extract from the report of Superintendent Harris to the St. Louis School Board, on the subject of introducing a course of lessons in Natural Science into the District School course of study.—ED.]

I. IT will be conceded, I think, that we cannot teach everything in the short period devoted for schooling. Even were the period of schooling much longer than it really is, there are many things learned much better out of school than in it—many things learned much better at home, or in the field or work shop than in a school room. But with our short school period, lasting on the average for five years with us in the city, and about three years, more or less, in the country, there is the utmost need of the most careful selection of what is essential. The course of study must contain only what the pupil is not likely to pick up from intercourse with the family circle, with his fellow playmates, or with his fellow workmen. More than this, it must contain only such matters as have a general theoretic bearing on the world in which he lives, and the institutions and character of the human species of which the pupil is an individual.

II. It is clear, then, that the school must furnish the pupil theoretical insight. Here is a common ground, and it is a practical thing to give the pupil a knowledge of general elements which he may apply in after life to any one of the many trades or professions. Every boy and girl will find a knowledge of reading, writing, arithmetic and geography useful in any sphere of life that he or she may be called to fill. Whatever occupation they may follow, these branches will assist them. And what is said of these elementary branches is likewise true of the habits of character formed in a well-disciplined school, such as order, neatness, cleanliness, earnestness, industry, punctuality, truthfulness, self-respect, self-control, obedience to rule, kindness, forbearance, courtesy, considerateness, affability and politeness, sympathy and love.

III. I do not think there is much ground for dispute as to the order of these elementary studies. Reading comes first, for by it the pupil becomes able to pursue independent study and thus to add to what he receives orally from his teacher. Arithmetic may begin almost as early as reading, and writing should not be delayed at all. Geography should begin as soon as the pupil learns to read with some facility. Compared with other branches, these simplest elements are by far the most important, and nothing should interfere with their most speedy acquisition. They are in themselves the tools which assist in acquiring all other knowledge.

IV. Of man's instruments the most wonderful is language. His whole rational existence depends upon it. Some special study of the structure of this wonderful instrumentality has been found essential in all systems of education. Hence, we place the study of grammar next in importance after the four elements. History well succeeds grammar, for grammar prepares the way for it by analyzing the structure of the human mind as exhibited and mirrored in language. How the human character unfolds in time is shown in history. Knowledge of men is more important than knowledge of things, as we all find when we grow up and try to succeed in life. We learn that we can do nothing nor achieve anything without the aid and consent of our fellow men. We must, therefore, understand the springs and motives of human action, both the permanent ones and those that control temporarily.

V. Above and beyond these just named studies, which form a complete elementary course, such as has been wisely laid down by your rules as constituting the course of study for the district schools; above and beyond these follows the study of the sciences, of the higher mathematics, of those languages from which our own is derived, or which are kindred to it, and the literature thereof. These studies in their proper development form the high course of study, and are commenced in the high school.

VI. Now arises the important question: Should any or all of those higher studies be introduced into the elementary course? It is clear that in their proper form they cannot.

The study of foreign language by its structure ought to be preceded by some study of the native tongue. The study of the higher mathematics ought to be preceded by that of arithmetic; so literature cannot be well studied without a knowledge of the rudiments of geography, history, and grammar, to say nothing of reading and writing.

VII. The sciences are twofold: The human, i. e., social and political sciences, including political economy, pedagogy, and the like, on the one hand, and the natural sciences on the other. The human sciences require the highest maturity of thought for their mastery. The natural sciences, which are divided into physics (including those to which mathematics are applied) and natural history (including the sciences defining inorganic and organic nature, the elements, the plant, the animal and man), imply first a direct application of *mathematics*, and secondly, an indirect application of the same in order to comprehend the working of the instruments through which nature is observed and classified. Hence it is evident that so far as complete study and exhaustive survey is concerned, the place for the study of the sciences is in the higher course, as has been determined by the rules of the Board.

VIII. But there is a further question to settle: Can we not give those children who study five years, or a less time in our schools, some knowledge of the outlines of Physics and Natural History, which will be of great service to them in after life, and for the time being not interfere seriously with the prosecution of elementary studies?

This question I answer in the affirmative, on the following grounds: The value of all higher studies is twofold, one as giving us the practical mastery over their spheres through a complete comprehension of them *scientifically*, the other as giving us a technical mastery over their spheres, thereby adding to our general culture, or, as we express it, "general information." For instance, it is not necessary to be thoroughly and scientifically an astronomer to read with pleasure and profit the third volume of Humboldt's *Cosmos*, or indeed most writings on the subject of astronomy. But without an elementary course of some sort in astronomy those works would be sealed books. The general ideas of

a science and its mode of procedure and its technics may be acquired with little labor, nay, it may be a mere pastime to do this. On this ground we may introduce certain outlines of Natural History and Natural Philosophy into the lower grades of our schools.

To illustrate my meaning, I have sketched the outlines of a course of study on Natural Science.¹ I have followed therein the reference books provided by the Board for the teachers, and have paid special regard to the resources which they furnish. That these lessons should be oral, conducted by description and illustration on the part of the teacher, and impressed on the minds of the pupils by questions and answers, together with free conversation, seems to me the proper mode. And, inasmuch as this exercise should serve as a kind of recreation and relaxation from the regular course, I recommend that one hour be set apart for it on each Wednesday afternoon in each room of the district schools.

X. The course here recommended recognizes the two-fold division of Natural Science into Physics and Organics; and, in order that the pupil may get a view of the whole as often as possible, and may review each subject as often as he comes to a new stage of intellectual insight, it will be observed that in the seven years' course there is a spiral movement, or recurrence of the same topics: 1) The subjects of Natural Science, a) the plant, b) the animal, c) the physical elements and mechanical powers—constitute a primary course of three years; so that even those who receive the minimum of school education shall acquire some insight into the elements and instrumentalities which play so important a part in the industrial age in which they live. 2) In the fourth and fifth years these subjects of Natural Science are all taken up again in a second course and much more scientifically developed: a) Botany, its method and practical application; b) Zoology and Human Physiology; c) motion and force in masses, in particles, and as applied in the mechanical powers; d) Astronomy (forming a transition to the grammar school course in Physical Geography). Five

1 Which will appear in our next.—Ed.

years is the average attendance on our schools; hence the average pupil will get two courses in Natural Sciences. 3) In the sixth and seventh years of the district schools a third course in Natural Science is given, in which begin to appear more clearly in outline the several sciences. a) Under Natural History or organic nature: Geology, Meteorology, Botany, Zoology, Ethnology. b) Under Natural Philosophy, or Physics: Matter, force and motion, machinery, molecular forces and instruments involving their application.

THE SONS OF PESTALOZZI.

FROM THE GERMAN.

CHAPTER XIX.

LIENHARD NESSELBORN'S father had hesitated for some time, before sending his granddaughter to the Waldenburg Seminary, a chartered institution in which females were fitted for the teacher's profession. This hesitation arose from his unwillingness to entail upon his grandchild the hardships and trials of this calling, and partly from his doubts whether women ought to be teachers. In his perplexity he had solicited the conscientious advice of his son Lienhard, who had answered him as follows:

"I have always been of the opinion of Pestalozzi, our great master, that the school ought to be a continuation of the family, and that the teacher should act as a representative of both parents, in the strictest and truest sense of the word. I myself felt within me this yearning of my heart towards my pupils, this spark of holy love for every one of them, strangers as they were to me in the world. For me, the school-house was but another home, another domestic hearth. And why should not woman preside there as well as man? But still, how fearful was the lesson that Providence seemed to teach our noble master, Pestalozzi? Gertrude, his faithful friend and assistant, the very type of woman-teachers, who had married the most gifted of his

instructors, became the mother of an idiot! A Frenchman has lately pronounced every woman to be sick by nature. He might have said that every woman seems to be under the influence of a peculiar law, humiliating perhaps for human nature. By force of this law women are sensitive, nervous, uneven, eccentric, even in their virtues. Thinking of female teachers as an institution, I cannot repress a feeling similar to that shudder which I always experienced in South Germany and Switzerland, when observing there the great number of female functionaries employed in telegraphic bureaus, in post offices and as ticket agents at railroad stations. I surely do not doubt their abilities, punctuality, and general trustworthiness. I do not agree with Dr. Wehrmann, one of my teachers, who has compared those female officials with green-finches, trained to pull up their food in little carts to their cages. He thinks women to be endowed only with a kind of *quasi-intellect*, as he calls it, which would make it impossible for the authorities ever to rely on the returns of such 'responsibilities in crinoline.' But the cause of my repugnance to such practice is in the displacement of the boundary between home and world; in the fading away of that charm which the sentiment of ages has thrown around the secluded and, as it were, veiled life of women; in the defiance which women begin to hurl at the whole male sex, which must fail, in making emancipated Amazons contented and happy; in the transfer of woman's life, the proper sphere of which is in the heart and soul, to the dust and mire of every-day life. However, as we cannot make the world anew, but must take it as it is, we have often to make a virtue of necessity. We hear everywhere complaints at the scarcity of male teachers for common schools, the inadequate remuneration deterring young men from following this profession. Let us, then, honestly try to engage women in a vocation which, certainly, is the least hazardous of all kinds of emancipation."

The consequence of this letter had been Gertrude's entrance into the Seminary, the stern and rigorous discipline of which had imparted to her mind a maturity far beyond her years. She had entered now upon her duties in her uncle's institution, in which, since it was a boys' institute,

she could, of course, not be employed in the capacity of teacher. She had been assigned to the direction of the economical department, and her keen eye soon discovered that reforms were needed in almost everything. She resolved to carry them out to the best of her abilities. Her position enabled her to trace the existing disorders to their very sources. Her aunt was one of those strange beings who, while perceiving defects and injurious practices, nevertheless declined to remedy them, and even disliked to have them mentioned. For mending faults would involve the acknowledgment of their existence. Instead of it she had contracted the habit either of explaining appearing grievances away, or of excusing them by the character of the persons whom she had to employ as her instruments, and who, according to her theory, ought to be taken as they were, not as one might wish them to be. "Please, dear," she said to Gertrude, "do not let your laudable zeal for abating nuisances go so far as to necessitate a ceaseless change of our people. As matters stand, we have to suffer enough from these hateful changes. For ours is a private institute, which cannot hold out to young teachers such inducements of future promotion, as the institutes of the State. Teachers will accept positions in our school only for short periods; they will leave as soon as they can do better, and new teachers must be appointed in their places. It is almost worse with the domestics. Servants are invariably bad. If we would have eyes for all their shortcomings, the changes would have no end, and the new servants, perhaps, would do worse than the old ones. The best maxim is, not to strain at gnats. Many a bad servant I have reformed by ignoring or generously condoning disorders that had come to my knowledge, and you had better follow my example."

Although Gertrude had promised to profit by these hints, she nevertheless came into daily conflict with the powers that be. These ruling powers were not her uncle or aunt, but the selfish course taken by almost every one in the house, the negligent ease of the boarding teachers, the spirit of insubordination among the students, and the guilty complicity of the servants in all manner of irregularity. The care for Theodore Waldner was not the least of Gertrude's

assumed duties. Not only did she provide for his physical wants, but she tried also to replenish the stores of his mind. In this respect she had an invaluable support in Fritz Bechtold, one of the boarding teachers. This young man, who had become tenderly attached to Theodore, did all in his power to supply the many deficiencies which a "posthumous education," if we may so call it, had left in Waldner's knowledge. Bechtold taught only the lower classes, and being nothing but a "Normal School graduate," was treated with little regard by the "learned" gentry of the institution. But Gertrude's uncle, to her keenest joy, had justice enough to appreciate the young teacher's merits. "They are all not worthy," he would say, "to unloose his shoe's latchet. While these philologists are swollen with pride and arrogance, they have no clear idea in their brains, and no inspiring words ever go fertilizing from their lips to the hearts of their hearers. And yet they denounce in their classical arrogance our worthy elementary teachers as overbearing. It is simply because these latter have sense enough to know that scholarship and teaching are two different things. Our Professor Tipfel is an authority as to the Latin poets, but in all other respects his mind is filled with utter confusion. Wehrmann pretends to be a universal genius, considering himself competent to teach any subject whatever, and yet he is unable to make even the simplest Euclidean theorem clear to his pupils. Magister Schlickum has acquired *his* method, by teaching counts and princes as their private governor. But a private tutor he will remain all his life. He will never be able to teach in that boldfaced type which alone is understood and appreciated by large classes. Bechtold's teaching, on the contrary, is as if cut in granite. For him, the short allowance of his knowledge is like a well packed knapsack for a traveler. Everything is handy to him, and he knows where to find all he wants at a moment's notice, while your big tourist with his endless baggage train is ever at the mercy of circumstances, and can never find what he is looking for. Just so short cut is Bechtold's way of keeping discipline. His very words are deeds. There is no occasion for him to retract anything. He simply commands, and the student obeys, while in Tipfel's, Wehrmann's

and Schlickum's classes the students do nothing but argue with their teachers. No order is ever executed precisely as it has been given. And no wonder, for Mr. Tipfel, during the recitation, is thinking of his last criticism in Jahn's "Jahrbücher"—Mr. Wehrmann's mind is full of his last purchase of books, and Schlickum is engaged in reviewing the brilliant display of his scholarship at Mrs. Nesselborn's last tea-party.

In the portrait which Mr. Nesselborn had drawn of Professor Tipfel, there was one most ludicrous feature omitted. This scholar considered himself the model of a pedagogue, and discipline was the third word in all his conversations. Indeed, if the art of discipline consisted in blustering, scolding and shouting, Prof. Tipfel would have been the most consummate of disciplinarians. He had been, of late, a professor in a public gymnasium, which position he had resigned, partly in consequence of a rich marriage, partly on account of difficulties with his chief, who had reviewed one of his late publications with cutting sarcasm. Afterwards Nesselborn had succeeded in winning Prof. Tipfel for his institution, and prided himself not a little on the acquisition of a man considered the greatest living scholar as to Latin satirists. He was of dwarfish, ungainly stature, which made the outbursts of his anger irrepressibly ludicrous. From his perpetual blustering and scolding, he was nicknamed Jove the cloud gatherer; but his Olympic thunders were only empty sounds. He noticed absolutely nothing that was going on in his class. Thus he neither knew that he was perpetually laughed at by his students, nor was he aware that they had firmly established the practice of passing to each other "ponies," or those printed "Preparations" which a fiendish enemy of education (his name, strangely, is Freund)¹ has launched into the world. It was almost grotesque to see how this Olympic Thunderer would pass into the language of common mortals whenever the gravity of the school was interrupted by any event of out-

¹ FREUND (friend), the notorious compiler of the Latin Lexicon, which Dr. Andrews took the trouble to translate into English, one of the worst educational and philological scribblers, has compiled so-called "Preparations," calculated to supersede almost all hard and serious study—very similar in character to the publications of certain American houses, pretending to teach "History," "Chemistry," etc., in ONE TERM.—*Translator.*

side life. If rain or hail suddenly began to fall, or if a bird would light on a window sill—reminding the nervous little man of the ill-omened auguries of ancient times—or if a lamp or the stove would smoke, this Jove or Juppiter (upon which spelling he rigidly insisted) would become a perfect child and show himself a most helpless being.

A characteristic incident had happened on the day when young Count Linsingen had been sentenced to “twenty-four hours Carcer.” Professor Tipfel had caught a severe cold in his head, which he attributed to some gross mismanagement on the part of Mrs. Nesselborn out of spite against him. He was in the passage-way, loudly expostulating with some domestics, in utter disregard of section 8, of the school regulations, according to which “all noisy talking in the corridors” was strictly prohibited.

“I am not going to lose my life and health in this house. That scrubbing of my room, and the indignities heaped on me—”

“What is the matter, Professor?” he was asked by some inmates of the house who were attracted by the noise. But the Professor, being caught by a violent sneezing fit, was unable to utter a word. In the meanwhile Mr. Nesselborn had joined the party. He had been just informed by his wife that Count Linsingen was going to complain to his father of the punishment inflicted on him, soliciting his removal from the institute. Scarcely was this news communicated to him, which was by no means apt to improve his humor, when Prof. Tipfel’s scolding voice struck his ear. He requested the Professor to step into his study, but allow his sneezing fit to subside before giving an explanation. But Tipfel took this advice for an insult, and his anger, as far as his sneezing would allow him, burst out with the greatest violence.

“Mr. Director,” he exclaimed, “to-day, you know—*peshee!*—is Monday. The last recitation I heard, was Horace’s Epistles, on Saturday last from 11 to 12. I concluded the lesson with the jest of the great Venusinian—*peshee!*—‘The philosopher is everything, the king of kings, free, full of honor, beautiful, and healthy withal—*peshee!*—unless he should happen to have a cold in his head’—for thus I interpret the

words *nisi si pituita molesta est*. Having explained this passage, I proceeded—*peshee!*—to examine the written lessons of the class, and found that the translations of six of the day scholars and two boarders were most miserable. I ordered them—*peshee!*—to remain in school till one o'clock. On my way home, I entered—*peshee!*—a book store, and after making there some purchases, whom should I see—*peshee!*—but my six day scholars, passing saucily by the store. I rushed out immediately, and stopped them. *Quo terrarum?* asked I. They said, Mrs. Nesselborn had sent them away, because the classroom had to be scrubbed. Good!—*peshee!*—I had to submit of course. I am used to that. But this afternoon—you know I have no lessons to give on Monday forenoon—when I stepped into the room, the odor of burnt junipers¹ met me. I know this odor. Already the ancients knew and dreaded it! *Juniperum metuens*—has a satirical fragment of Hadrian's time. But when I repeated the end of last lesson to introduce the recitation—*peshee!*—the words *nisi si pituita molesta est* became a dreadful truth; for I had soon to sneeze, not once, but three, four times! I directly ordered the windows to be opened—*peshee!*—but as it was hailing, they had to be closed again. Now, sir, the fact is that the room had just been scrubbed, had been overheated, and filled with pestilential vapors—”

“But, my dear sir,” interrupted Nesselborn, “you forget that the scrubbing had already been done on Saturday. How was it possible, then, that to-day—”

“No, no, no!” cried Tipfel after another sneezing paroxysm. “That is just the unheard of fact, the *scelus infandissimum*, the outrage, sir, which provoked me no less than my sudden cold: On Saturday, the room was *not* scrubbed, do you hear? *not* scrubbed. But Mrs. Nesselborn had my room scrubbed just before my recitation to-day, which was evidently meant for a *demonstratio ad oculos, ad aures et nares*—*peshee!*—that her dismissal of my delinquent boys was a purely arbitrary act on her part, a perfect *sic volo; stat pro ratione voluntas*, another *tel est mon plaisir!* I demand satisfaction, sir! I often had, in this house, to silence the voice

¹ These are commonly applied in Germany to counteract the vapors of freshly scrubbed rooms.—*Translator.*

of self-respect, but the preservation of my life and health, sir, is a duty that I owe to my family!"

With these words the Professor rushed out of the room. Nesselborn called after him to propitiate, if possible, the angry man. But his efforts were in vain, and he threw himself in despair on his sofa; for he knew that Tipfel, who was perfectly independent would most probably send him his resignation, an issue which he anticipated with dismay, since the name of the renowned scholar induced many parents to send their children to the institute.

At this moment Gertrude entered the study to bring him his afternoon coffee. Mrs. Nesselborn had left the house to make some calls.

"How is it with little Horace Gordon?" asked her uncle. This boy, who had come from England, being entrusted to Nesselborn's special care by his parents, was lying dangerously sick of the typhus fever.

"He is delirious," she answered. "The doctor ought to call oftener, I think."

"Mrs. Bröge is with him, is she not?" asked Nesselborn.

"Mrs. Bröge is the poorest nurse in the world," she replied. "I think, I ought to take her place in the sick-room to-night."

"No," said her uncle. "Let Mrs. Bröge do her duty."

"The doctor is very negligent, indeed," she continued.

"Staudner negligent?"

"You ought to take another physician."

"For little Gordon, you mean?"

"No, in general!"

"What do you mean? Staudner is my oldest friend."

"In this house you have more important duties to fulfill than those of friendship."

"You only wish to get out of the house all the people that you found here."

"Only those that are good for nothing."

"Do not judge! Nothing in the world is perfect!"

"That is a mistake. A medicine, for instance, *must* be perfect, or else the government will close the shop. A physician *must* be always the best we can find."

"But Staudner is one of the most popular physicians."

"Yes, with men and women of the world. But for your institute Staudner is *not* the right man. The physician of an institute ought to be a man of dignity and self-respect."

Nesselborn, to change the conversation, pointed at one of the statuettes in the niches of the room. It was that of Æsculapius. With reference to the bald head of the healing god, he said:

"Does not Staudner look very much like that statue?"

"I wish he would look like that other one," replied Gertrude pointing at a manly, tall figure which had a paper roll in one of his hands, while both his arms, with inimitable grace, were holding the folds of a Greek cloak."

Nesselborn smiled, and said:

"Yes, my child, that statue *is* beautiful. The scholars say that it represents Demosthenes; but they are mistaken. No ancient sculptor would have ever given such a position to Demosthenes. No orator, in the fire of his eloquence, can stand thus with such a neat and regular drapery of his cloak. The reality of life follows other laws, my child, than our theory. It is precisely our own case. If you will continue aiming at an ideal state of things, at which, in our circumstances, we can never hope to arrive, you will only live to be disappointed, and poison the happiness of your life."

Gertrude stood quietly for a while, fixing the statue with her intelligent eyes. Then she said:

"And yet, uncle, it *is* the great orator. The artist has only chosen the moment when Demosthenes is preparing in his own house for the great battle that he is going to open on the tribune. Just see! He is looking once more over his notes. He has dressed carefully with a decent regard for the great audience he is about to address. The very folds of his drapery are expressive of that clearness and systematic order which are the first requisites of every composition."

The uncle nodded a silent assent. After a pause he said sadly: "I am very, very unhappy, my dear child! Heaven knows that my intentions were pure! My institute was to assist at the great work of ennobling the human race. It was part of my plan to sow the seed of nature and humanity among those higher classes which of all others have always

been least disposed to acknowledge the worth of man as such! And now I must confess the truth of the known Horatian words, 'Worse are we than our fathers, but will die *relicturi progeniem vitiosorem*—' which means—"

"I know what it means. But these are the words of a heathen. We Christians have a different faith."

"You mean that we ought to believe in an education of the human race by God?—Perhaps, but what do the works of man amount to? What is the fruit of all our teaching! It is like pouring water into the tub of the Danaides, or like the labor of Sisyphus! Wherever I turn my eyes, I see weeds of a man's size, and under them growing—dwarfish wheat!"

"It is your own fault, dear uncle!"

"Have I God's own messengers to assist me? Must I not till my field with the common, universal plough!"

"You will always find tolerable persons to help you. Put these in the right place. Support their measures by your own authority and dignity! Remove such of your scholars as are setting bad examples! Turn out every one of the domestics. Janitor Bröge ought to be sent out of the house this very day."

"He has always been honest and conscientious in collecting my school fees."

"One single good quality cannot make up for a dozen bad ones. He has made advances to the Roumanian Princes, and taken their notes for double the amounts."

"My former janitors had other faults."

"His wife is secretly forwarding the correspondence of your boarders which they are forbidden to maintain."

"I cannot be a spy on my own pupils, and must rely on their honor."

"But *dishonor* has got the better of honor in this institute, and will force you from one false position into another."

"What shall I do, if Tipfel resigns?"

"Let him go, and fill his place with the young man that has lately applied for a position."

"You mean him that has been a tutor in the de Fernau family? Do you not know that he has abruptly dissolved his connection with the Fernau's, and that they are greatly dissatisfied with him?"

"Yes, because he refused to hush up the misdeeds of his worthless pupils."

"You know, I have a mortgage of \$20,000 from the Fernaus, and I must not give them a new cause of finding fault with me; for Waldner's presence is a thorn in their flesh. So much they have given me to understand already."

"Let it rankle deep, deep, that thorn," said Gertrude. Her eyes flashed for a moment, shooting the petrifying glance of a Medusa. There was nothing in her then to betray her menial position. Had she worn purple and silk, she would have looked a queen. Her nostrils dilated, her lips closed, and the marked outlines of her plastic face bore the expression of classic antiquity.

At this moment the door opened, and a hoarse, repulsive voice betrayed Staudner's presence.

Gertrude measured him with a glance of infinite contempt. "Beware of that man, uncle," she said aloud, and left the room. Staudner, bewildered, looked after her with his fishy eyes, widely opened over his blue glasses. Then he approached Nesselborn to report on the condition of little Gordon, whom he had just visited.

FEMALE EDUCATION.

THE training of the young is undoubtedly one of the main employments of women. In spite of all modern political agitation for adding to woman's responsibilities, no duty can ever be so important and so noble as teaching. In every rank, during the first two years of a child's existence, its mother must be its chief instructor. In the better classes of society it is usual for the mother to superintend, if she does not altogether conduct, the education of her family until they are all several years older. Such being the case, it is evident that the services of the mothers must be secured if we are to have proper female education. It is also equally obvious that if the education and training of the mother herself has been neglected, at first as a girl, and afterwards when a woman, the influence for good, which she should

bring to bear on her children, must be very materially diminished.

Three practical questions then arise, namely:

1. How is the present race of mothers educated? 2. What results follow from the existing condition of their education? 3. How can the plan of their education be effectively improved?

I. Without wishing to speak disrespectfully of the gentle sex, it must be boldly stated that their education, as a class, is woefully neglected, and that, such as it is, it is utterly unfitted to the duties and circumstances which they will be called to fulfill in the years which follow their childhood and youth. In this respect, strange as it may seem, the condition of what are called the higher classes is worse even than that of the industrial classes. It is almost true, as a rule, that the higher the social scale, the worse in quality is the education given to the daughters of a family. The instruction given at the present time to a girl in a common school, if insufficient, has generally about it something practical which the "young ladies' schools" might often imitate to advantage. As the public school system grows more thorough, it is likely this difference in quality will become greater; and, unless the private schools improve, it is to be hoped such will become the case. The teaching at the District and Ward schools is really immeasurably beyond nine-tenths, if not ninety-nine hundredths, of the Seminaries and Institutions, from which fathers receive such elaborate bills, and such reports of their daughters' instruction, at the end of each session.

The reasons for this are not difficult to discover. Common schools are regulated to a great extent by practical laws. The mode of teaching, the changes in management, books used, and subjects taught, are matters of deep concern to the public, and are consequently looked after by competent and practical officers, who owe a duty to the State in seeing that its laws are properly administered to the public good. They are mostly impartial persons who have made the subject of schools their study. In the case of private schools such is not the case. The persons who keep them are dependent on popularity for their living, and

are, accordingly, obliged to suit their instruction to the wishes of the parents. These are, in fact, the employers of the teachers, and they purchase what education they think proper and most desirable for their daughters. This means that what is fashionable is the ruling power in dictating the course of instruction to girls.—Fashion is at best but a dangerous guide; and at the present time, as I shall more fully consider further on, it is leading the education of girls in a pernicious course.

It may be argued that such a system prevails in all private schools for boys. Here parents equally direct the course of instruction, but with different results. It is true that the long continuance of the teaching of the classics, to the exclusion of most other subjects, must be attributed partly to this feeling, as is shown by the fact that "Classical" schools are even still considered "fashionable." As a general rule, however, parents try to educate their boys so that they may be fitted to get their living as early and as readily as possible. Girls on the other hand are but too frequently brought up to be fashionable. Their occupation is to be fashionable; without that it is feared they will stand no chance of success in life. Attractive accomplishments, however superficial, are more showy than solid merit; and no doubt mothers display a good deal of knowledge of the world when they calculate on such things as setting their daughters off to the greatest advantage.

The highest aim at hundreds of "Female Institutions" is to impart to the pupils a superficial knowledge of Music and French; and when Italian can be added, if only enough for a few songs, the school takes rank at once as a finishing establishment of high order. Doubtless all these subjects are desirable; but the evil is that they are taught to the neglect of sound instruction in elementary subjects. A large number of girls brought up—they cannot be called educated—at what are looked upon as fashionable, first-class private schools, would be unable to pass such an examination in arithmetic, reading, and needlework, as the majority of the girls at any one of the Girls' Grammar Schools of New York City qualify in, as a matter of course, before they leave that school. Drawing and fancy work are

usually among the polite subjects of instruction. The former, however, is very rarely well taught. The drudgery of learning is avoided. Perspective, free-hand drawing, and the elementary training of the hand and eye, are often not thought necessary. As all girls are not naturally artists, copies have to be given far beyond the power of the pupil, but which may be sent home as specimens of the teaching of the establishment. These drawings are frequently touched up by the teacher, and arranged for home inspection, to the admiration of the parents and the gratification of the child, who is often amazed at the improvement in the landscape she has toiled over so long, and every detail of which she has become so tired of alternately putting in and rubbing out. Fancy work, though no doubt desirable in its proper place, is taught to the entire exclusion of plain work; and teaching the art of darning a hole in a damask tablecloth, not to venture to mention the same operation on a very important article of clothing, is almost extinct among most of the so-called superior schools of the present day.

Girls thus brought up are becoming the mothers of the rising generation; and, in spite of the progress which education is making, and bids fair to make, within the next few years, there is unfortunately little or no prospect of improvement in the upper grades of society, so long as the existing sentiment continues.

I do not wish to imply that the methods of female education have fallen away from any perfect condition in which they existed in former years. It is the habit of some persons to think that, in the good old days long gone by, things were always better than they are now, and many parents may be heard to bemoan the inferiority of the schools to which they have to send their girls now to those in which they themselves were brought up. It is feared, however, that the ladies' seminaries of the past were not much better than those of the present, if even they were so good. One exception, perhaps, must be made: common needlework was formerly more thought of, and in this we have gone back. The consideration that girls' schools are not altogether degenerating, but have really always been deficient, is serious from the conviction which must follow

that not only is an improvement necessary, but that a completely novel system of education must be successfully brought about, if the desired end is to be secured, and if girls are to be educated in such a manner as their position, their abilities, and their duties, render not only desirable but really essential to the well-being of the community.

II. *The results which follow from the present condition of female education.*—The evils of the way in which girls are brought up are two-fold. Not only is it a great injury to the girls themselves to deprive them of the ordinary benefit of education, but it also acts in a very serious manner in tending to prolong the reign of ignorance, inasmuch as those who must be the first instructors of all are quite incompetent to perform their most obvious duties towards the rising generation. With the industrial classes this acts in a number of ways to the detriment of the household. The girl on leaving school at a tender age is either busily engaged at some steady employment in factory, mill or shop, or else she helps her mother at home. In the first case she learns absolutely nothing of her domestic duties; in the second, though she picks up what she can from the experience of her parent, that parent's previous training renders her but a poor instructor. She usually marries early, and is consequently as ill-fitted for the management of her family as her mother was before her. Her household becomes disorderly, she cannot manage the family income to advantage, and to these circumstances not a little may be attributed of the unsatisfactory condition of many homes, and the commencement of discord between husband and wife.

In the higher classes of society the effect of this deficient education is different, but the evil is no less serious. The mother is altogether ignorant how to set about training her children, and the most valuable time of infancy is often allowed to be spent almost entirely under the guidance of servants. In not a few cases young mothers really begin their own education from an attempt to instruct their offspring. Nothing, perhaps, makes people feel their own weakness more acutely than the attempt to teach others, and to answer the numerous questions of intelligent little pupils. Besides the very important consideration here re-

ferred to—namely : the loss which the children sustain—the young wife, as usually brought up, is unable to join in many topics of conversation, or to be interested in the numerous subjects which enter into the daily work and duty of her husband. This is an evil. It is not intended to argue that every woman should be bored with all matters which arise in her husband's daily routine, but she should be so educated that he may feel her to be capable of entering into his plans, and being interested in those matters which chiefly occupy him. It is detrimental to all mutual happiness and confidence if a man feels that his wife is too low in the scale of intellect for him to open his lips on any point beyond the beauty of her dress and the doings of her neighbors.

The large amount of gossip and small talk which exists among the females of all classes may be attributed to their inability to converse on anything of a more elevating nature. How is it possible for nine-tenths of those who have been brought up at the young ladies' seminaries to find interest in anything beyond the merest commonplace subjects? There are thousands and tens of thousands of ladies, the wives and sisters of educated men, who are ranked amongst the intellectual classes, and whose literature never goes deeper than a novel, and who do not care even to read a newspaper (unless it be "Society" papers) much less to take the slightest interest in the general topics of the day. It cannot be said that they are altogether to blame, though it may be a question whether the husbands of such ladies are free from all responsibility. A husband should not be content to permit his wife to remain thus, even if, after the honeymoon has passed, he finds that he was mistaken in supposing that a beautiful face always implies an equally cultivated mind.

In the matter of dress-making, house-keeping, cooking, and such like domestic essentials, the absence of education affects the poorer classes more, of course, than the rich. There was, it is said, a time when the highest lady thought it not beneath her to understand the culinary arts, but perhaps those days, like Burke's days of chivalry, have gone forever, and only exist in the memory of the past. With the poorer, however, such matters assume the importance of an econo-

mic science. Dickens' graphic description of Dora's house-keeping, in "David Copperfield," is not far from the actual truth in thousands of cases. In the arrangement of dress; in the judicious and economic selection of suitable articles, great waste comes from ignorance of the properties and uses of different materials. Very few girls have any idea of cutting out clothing, or are practised while at school in "turning and altering," and other essentials for a really thrifty and managing house wife.

Looking, then, at the condition of society in all its branches, it must be acknowledged that though woman forms the prominent character in all domestic matters, and though her education must have a most important influence, and must affect the whole nation, yet it is in a most unsatisfactory condition. Their deficiency, on careful investigation, is but too evident; and the evil consequences, though so serious, and so universal, are yet so old that society scarcely notices them, and can hardly appreciate the extent of the benefit which a reform, or rather, a revolution is capable of producing.

The practical improvements necessary will be considered in another paper.

G. R. C.

THE NEGLECTED LUXURY OF SPELLING.¹

DICKENS in "Our Mutual Friend," when describing the number and variety of begging letters, which, upon coming into his fortune, the owner of Boffin's Bower received, remarks with one of his inimitable strokes of humor: "Among the correspondents were several daughters of general officers long accustomed to every luxury of life except spelling." Now, I fear that the sarcasm with which our English author demolishes at a blow the false pretenses of these young ladies would not by any means secure the like conviction in our country, for I have known bona fide daughters of general officers in America, who, if their title to the position depended upon correct spelling, would disgrace it every time they took pen in hand.

¹ Miss Blanche Berard in Conn. School Journal.

This was not so in the old time before us. Our grandmothers knew how to spell. Among their school exercises, besides the ordinary daily lessons, there were what might be called *field days* for the practice of the then honored art. The scholars dividing into two parties, ("choosing sides," as it was called), were ranged in lines facing each other. The words were then given out, and the lively contest of "spelling down" begun. Each one who missed a word was obliged to fall out of line and take his seat, until by degrees only a few champions remained on either side; the high honor of standing alone occasionally falling to a single individual. Of course the match was won by the side which exhibited the greater number left standing when the lesson was finished. This was only one of several devices to secure attention to this humble and elementary, yet most important branch of education.

But now, alas! in the matter of orthography we have fallen upon evil days. The good practices above described exist to some extent still, in a few country district schools, perhaps, but in general they are falling more and more into neglect. Much of our modern culture is merely for show, and under the thin tinsel of supposed acquirements in other languages lie strange deficiencies in the knowledge of our own.

In our schools, generally, too little importance is attached to the study of orthography. No pains are taken to secure its being taught; and, in fact, one would think, to examine the programme of studies, that now-a-days children had grown so clever that what used to take time and labor to teach would come to them by a sort of instinct.

In support of the assertion that attention to spelling is woefully neglected in these days, I will cite the following fact: Within a week I have received two letters, the one from a middle-aged country woman, living at an obscure place called Bean's Corner, in the State of Maine. She has probably but the slightest pretension to what in these days is called education, and yet her letter has not a single misspelled word in it. The second letter alluded to is from a descendant of one of the oldest and best families in America, a lady of many accomplishments and high culture, and

yet her letter exhibits several gross mistakes in the spelling of words of common every-day use.

Apropos of this subject, a friend tells me that he knew a young man of excellent family and social standing, who was engaged a short time since as a book-keeper in a retail grocery. His penmanship was admirable, his arithmetic adequate to the position, and yet "eggs" were transformed by him into "edges," "pails" into "pales," "pepper" into "peaper," with many other equally atrocious perversions of orthography, until the end of the first week brought the notice that his services would not be required for a "spell."

The same friend informs me that he once attended a course of lessons in penmanship by one of the foremost teachers in this country, whose copies were so often misspelled that they furnished a fruitful subject of ridicule on the part of the pupils.

Perhaps the following Lament, found in the portfolio of a maiden aunt, may amuse your readers, and serve as an appropriate ending to this "scold" about the wretched spelling of these degenerate days :

My dear nephews have all passed through college,
And their sisters of school honors tell,
But, alas ! amid all their fine knowledge,
There's not one of them knows how to spell.

You would think Jim as learned as a Rabbi,
His collection of books could you see,
Yet he writes home from France that an "Abbey"
Is teaching him French "à Parreé."

Pretty Fan, who has gone on to Venice,
Into raptures at everything flies,
But especially glowing her pen is
When describing the famed "bridge of size."

With Donald and Duncan, twin darlings,
Spelling fares no whit better I fear ;
For they write me that soon at McParlins,
They will enter a "buisness carreer."

Yet these are all children of mothers,
Who in days that are gone would surpass,
In the triumphs of spelling, all others,
Standing oft'nest the head of the class.

GEOGRAPHICAL NOTES.

UNITED STATES.—The *Hassler*, a vessel built for the coast survey work of the Pacific coast, left Boston Dec. 4, 1871, for California *via* the Straits of Magellan, having on board Prof. Agassiz, Count Pourtales, and several scientific associates, whose object is deep-sea dredging, the fruits of which in European waters have lately been so important to geological science. Before setting out, Prof. Agassiz addressed to Prof. Peirce, superintendent of the Coast Survey, a remarkable letter, in which he stated distinctly what organisms he expected to discover at the bottom of the sea, and the proof he expected to derive from them of the immutability of species and the consequent falsity of the Darwinian hypothesis. This letter is printed in full in the *American Naturalist* (Salem, Mass.) for January.

—The report of the Chief Engineer of the Army to the Secretary of War, lately laid before Congress, gives a detailed account of deep-water dredging last summer in the course of the Lake Survey, particularly on Lake Superior, under the direction of Gen. Comstock. The deepest water met with was 169 fathoms.

—Under the protection of an escort of seventy-five infantry, detailed by Gen. Pope's order, Prof. E. D. Cope, of Philadelphia, occupied seventeen days of palæontological research, chiefly on the Smoky Hill Fork of the Republican River, in Kansas—one of the richest regions of the world in fossil remains. Many novel and gigantic skeletons, or fragments of skeletons, were discovered.

—Still another exploration, which we owe to the War Department, is that of the sources of the Yellowstone River. Readers of *Scribner's Monthly* will recall its interesting articles on this wonderful region, which has formed part of the Territorial Survey under Prof. Hayden, with results of which we have still to await the publication. The ground traversed by Capt. John W. Barlow, therefore, last summer, was not wholly visited for the first time. Copious extracts from his report to Gen. Sheridan were

published in a supplement of the *Chicago Evening Journal* for Jan. 13. His party consisted of a brother-officer of the Corps of Engineers, U. S. A., and of a topographer, assistant topographer and recorder, and photographer, together with twelve men, transportation, etc. Their object was to ascertain if a road was practicable from Fort Ellis to the sources of the Yellowstone, and thence across the divides to the Snake River Valley on the one side and the Wind River Valley on the other. The Snake River connection was deemed practicable by Capt. Barlow, but the other seemed more doubtful, though worth exploring, inasmuch as the natural route of connection between the Union and Northern Pacific Lines is by way of the Wind River, the divide offering the only serious obstacle. The expedition set out from Chicago on July 2 for Corinne, Utah, where they left the railroad and proceeded north to Fort Ellis in Montana, their base of operations. On the 16th they left the Fort in a south-easterly direction through the Bozeman Pass, and on striking the Yellowstone, followed up it and its tributaries to the famous Falls, surmounting which they came upon the most extraordinary geyser region in the world. Descriptions of the various hot springs, wells, volcanoes and geysers here met with occupy a large part of the report. The temperature of the sulphur springs ranged from 128 to 199 degrees; the columns of water ejected by the geysers reached observed and estimated altitudes of 130 to 200 feet. The mud springs are remarkable for the colors of their deposits—from "pure white, capable of producing the finest porcelain," to green, pink, orange, vermillion, and other hues. The Yellowstone Lake is 7,500 feet above the sea level, is very irregular in outline, and about twenty miles across. Its shores are so heavily timbered as to make the circuit of it difficult. The lofty mountains which encircle its basin form a watershed, in which the principal river-systems of the western half of the continent take their rise. The Falls of the Yellowstone are sixteen miles below the outlet of the lake, and are thus described:

"There are two falls. The upper has a sheer descent of 115 feet, and the other, half a mile below, falls from the crest of a vertical precipice 350 feet into the grand cañon. The beauty of the upper fall and the grandeur of the lower one are without parallel. For several

hundred yards before reaching the brink of the upper fall, the river descends over a series of cascades. The solid rocks on either side converge, until the channel is narrowed to about 80 feet. The velocity of the current becomes intense. At the crest of the fall the whole volume of the river is projected outward, and separated at once into conical masses of foam. These soon lose their individuality and gradually blend together, forming a dense white mass, which, upon descending, spreads out at the bottom with unparalleled grace and beauty. A point of rock jutting out just in front of and slightly below the crest of the fall, affords a convenient spot for observation, whence the whole beauty of the scene can be taken in at a glance. At the foot of this fall the cañon of the Yellowstone finds its beginning in a beautiful wooded gorge, between two and three hundred feet in depth. The river flows swiftly, though smoothly over a rocky bottom to the crest of the lower fall half a mile below. It then emerges from between its rocky banks and makes its prodigious leap of 350 feet into the depths of the great cañon. It is no small undertaking to descend the steep and slippery side of the cañon, even to the crest of this fall, while the yellow, volcanic and nearly vertical walls of the gorge beneath bid defiance to the most expert climber. The depths below are filled with hot springs. The rock is soft and crumbling, affording no secure footing, while the river rushes away in a perfect torrent over innumerable cascades and ripples, causing eddies and whirlpools, which would dash to atoms any unlucky adventurer who should be so unfortunate as to find himself engulfed in its waters. About four hundred yards below the lower fall, a fine view is obtained from a high projecting promontory."

On his return Capt. Barlow found the descent of the Falls on the right bank much easier, though the view from the bottom of the second fall disappointed him. The party reached Fort Ellis Sept. 1. The region explored lies, with the exception of Gallatin River, mainly in the north-west corner of Wyoming, and is comprehended between the parallels of latitude 44° – 46° , and of longitude 110° – 111° . A bill has passed the Senate, and we hope may pass the House, to reserve the geyser region as a public park.

BRITISH AMERICA.—The Hudson's Bay Company's report for last year mentions the death by small-pox of some 3,000 Indians in the Saskatchewan district—a very serious depopulation. There has been a great dearth of martens.

SOUTH AMERICA.—Coal has been discovered at Neb-linto in Chili. A new city on the Chilian map is Augol, a fortified place on the river Pecoiquen, in lat. $37^{\circ} 42' S.$, long. $72^{\circ} 17' W.$, about three miles south of the head waters of the river Verzaro, and twenty-eight miles from Naciminto. It was founded Dec. 6, 1862. (*Nature*, Dec. 28, 1871.)

—Mr. T. K. Salmon, of Guildford, Eng., is about to make a collecting expedition to the highlands of the Columbian republic. (*Ibid.*)

EUROPE.—M. Jules Simon, the French Minister of Public Instruction, has appointed a formidable committee to inquire into the reforms and improvements necessary to be introduced in the teaching of geography and the maps and geographies intended for schools. This is a wise remedy for the national weakness, France being in effect the China of Western Europe, ignorant of other countries and impervious to foreign criticism, and, as the late war sadly showed, ignorant even of its own geography. The schoolmaster who is to whip the schoolmaster who conquered at Sadowa, must train himself in geography to begin with. (See p. 294 of the *Paris Polybiblion* for Dec., 1871.)

ASIA.—A British expedition is about surveying the boundary between Persia and Beloochistan. Commencing on the coast of Mekran, the party will pass northward to Seistan and Herat. The former is a very interesting region, of which the geology and zoology are quite unknown. Special typographical features of interest are the Lake of Seistan and the River Helmund which it absorbs.

—Muscat is now to be divided on the map into two states—Muscat and Sohar.

AFRICA.—The "Livingstone Search and Relief Expedition," promoted by the Royal Geographical Society, was to leave England the first week in February, headed by Lieut. Llewellyn Dawson, British Navy. On Dec. 22, the *N.Y. Herald* published a letter five columns long from a correspondent whom it had directed to head an expedition for the same purpose. This person wrote, July 4, from "Kwihara, District of Unyanjembe," a point about two-thirds of the way in a direct line between the Zanzibar coast and Lake Tanganyika. The substance of his diffuse and grandiloquent report is, that, arriving on the coast on the 6th of January, 1871, he was occupied two months at Bagomoyo in organizing his expedition, and on April 1, after having despatched successively five "caravans," as he calls them, himself pro-

ceeded with the sixth into the interior, and, by forced marches in the rainy season, reached the station from which he wrote. His news in regard to Livingstone is almost worthless. One report made him wounded in the thigh while buffalo-hunting. Another made him dead; a third left him deserted by all his men. All seemed to agree on Livingstone's having left Ujiji, on Lake Tanganyika, for some point west of the lake. In another month the correspondent hoped to reach Ujiji and meet Livingstone if he had returned there. This place was mentioned by Livingstone as one he was seeking to reach as long ago as July, 1868, and it does not seem probable he could have been detained three years in the neighborhood of it. Another bombastic dispatch in the *Herald* of Jan. 19, tells of a *Herald* expedition in quest of Sir Samuel Baker! It had reached Korosko on the Nile.

—It is a matter of sincere rejoicing that British sovereignty has again been extended to the Vaal River. The diamond fields included in the reannexed territory will, together with the gold fields of the Trans-Vaal, inevitably have the effect of breeding a new race of African explorers, and of opening up the southern part of the great continent to settlement and civilization. Already it is reported that the diamond capital at the Cape, "Adamanta," has a permanent and floating population of 20,000. The diamonds found near the river are said to be finer than those obtainable inland. They occur in a gravelly stratum, lying immediately under a hard and lime-like stratum, three or four feet in thickness.

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NEW LEGISLATION FOR SCHOOLS.

BY the GEORGIA SCHOOL LAW as amended Jan. 19th, 1872, the Governor, Attorney General, the Secretary of State, the Comptroller General and the State School Commissioner constitute the Georgia State Board of Education. Of this board the State School Commissioner, appointed by the Governor, is the chief executive officer, whose duty is to superintend the business relating to the common schools of the State; to visit the Senatorial Districts and examine into the administration of the school-law; to apportion the revenue to be raised to the different school districts of the State—each county being one district—and to make an annual report to the General Assembly.

The law provides for the selection of five freeholders in each county, who, holding office for the term of four years, constitute the County Board of Education. It is the duty of County Boards to lay out and describe sub-districts throughout their respective counties; to establish in each sub-district a school of such grade as may be required; to make all necessary arrangements for the instruction of the white and colored youth in separate schools, providing the

same facilities for each, as regards school-houses and fixtures, attainments and abilities of teachers and length of term time—"but the children of the white and colored races shall not be taught together in any school of this State."

The County Boards are invested with the title, care and custody of all school-houses, sites, school-libraries, apparatus and other property belonging to the district, with full power to control the same. They have the power to prescribe what text-books and books of reference shall be used: *Provided*, That the Bible shall not be excluded from the public schools of the State, and no book of a sectarian or sectional character shall be introduced.

The Secretaries of the County Boards are *ex officio* the County Commissioners of Education, and consequently, the medium of communication between the State School Commissioner and subordinate school officers. They must visit the schools of their respective districts at least twice in each year, securing, as far as possible, uniformity in their organization and management, and their conformity to the law, regulations and instructions of the State Commissioner. "They shall provide the most approved school furniture, apparatus and school agencies, and furnish teachers with regular forms, blanks, reports, etc."

Provision is made for the establishment of evening schools at the discretion of County Boards; also for the organization of one or more manual labor schools on a self-sustaining principle.

Applicants who pass a satisfactory examination before the County Board receive a license to teach from the County Commissioner, who has the power to revoke such license.

TACT.—Love swings on little hinges. It keeps an active little servant to do a good deal of its fine work. The name of the little servant is Tact. Tact is nimble-footed and quick-fingered; tact sees without looking; tact has always a good deal of small change on hand; tact carries no heavy weapons, but can do wonders with a sling and stone; tact never runs his head against a stone wall; tact carries a bunch of curious-fashioned keys, which turns all sorts of locks

EDUCATIONAL INTELLIGENCE.

MAINE.—In the eighteenth annual report of the Common Schools, the Superintendent, Mr. W. Johnson, says: The public schools of the State have generally been successful during the year. The average attendance of pupils has been about the same as last year; the quality of instruction has been evidently superior to that of former years, a fact attributable to the influence of higher wages, Teachers' Institutes, and Normal Schools. County supervision in most of the counties has demonstrated anew its value as an educational agency, and vindicated its rank as the "right hand" of influence in the school-room, and in stimulating and directing the efforts of interested educators to proper channels of activity. The following is the summary of statistics: Population of State, 626,915; number of districts and parts of districts, 4,353; number of districts with graded schools, 420; number of school-houses, 3,917, of which 119 were built last year; whole number of children between 4 and 21, 225,508; number registered in summer schools, 120,295; average attendance, 93,066; number registered in winter schools, 134,065; average attendance, 107,717; average length of schools for the year, 19 weeks, 3 days; number of male teachers employed in summer, 119, in winter, 1,801; number of female teachers employed in summer, 3,790, in winter, 2,180; average wages of male teachers per month, excluding board, \$32.44; average wages of female teachers per week, excluding board, \$3.43; average cost of board per week, \$2.30; aggregate expended for educational purposes, \$1,043,988; estimated value of all school property, \$2,488,523.

PENNSYLVANIA.—The thirty-eighth annual report of the State Superintendent of Common Schools, contains the following statistics: Number of school districts, 2,023; number of schools, 15,700, of which 4,634 are graded; number of school directors, 13,320; number of teachers, 18,021; average salaries of teachers per month, male, \$41.04; female, \$32.86; average length of school term in months, 6.36; number of pupils 834,614; average number of pupils, 567,188;

cost of tuition for the year, \$3,926,529; total cost, including expenditures of all kinds, \$8,580,918; estimated value of school property, \$16,889,624; amount appropriated to the several State Normal Schools, \$189,965. The five Normal Schools that were in operation during the year, have had, since their organization as State schools, 14,137 pupils, of whom 2,507 attended last year. They have graduated 469 students, 127 the past year. The number of academies and seminaries is 161; number of private schools, 346; pupils attending private institutions, 19,394. A portion of the report that is worthy of considerable attention, is that in which several important questions now before the educational community in Pennsylvania, are discussed. Among them are—1. That concerning truant, vagrant and neglected children. 2. That concerning a more complete provision for higher education. 3. That concerning a closer union between common schools and colleges. The report is accompanied by a number of well-prepared tabular statements which show in detail the present condition of the schools and by the usual reports of county superintendents, principals of Normal Schools, etc. It also contains an interesting account of the nature and peculiarities of the system of common schools.

VIRGINIA.—We are glad to learn that the present Legislature of this State contains a much greater number of pronounced advocates of the public school system than the last. Nothing has yet occurred which indicates any change of policy on the part of the general government, in regard to the school system. The Superintendent announces his intention of requiring hereafter a stricter adherence to the details of the law. Hitherto great leniency has been shown towards all faults and failings. This was justifiable in the beginning of a system so extensive and detailed; but circumstances seem to show that this spirit of indulgence has been misunderstood. The most positive requirements of law have been neglected in some places, and very imperfectly carried out in others. Slight difficulties or complaints among the people, or want of energy on the part of certain officers, are made the apology for disregarding the law. The central authorities will not permit this to continue.

MOBILE, ALA.—An esteemed correspondent reports the people of this city thoroughly awake to the importance of having their children well educated. The free schools are crowded to overflowing, while the private schools are more flourishing than ever before. The colored people, very generally, avail themselves of the advantages of the free school system. Mobile is to be congratulated on her educational facilities.

TENNESSEE.—Professor Henderson Presnell, who edits the Educational Department of the *Herald and Tribune*, Jonesborough, indulges in the following plain speech concerning the "Educational Outlook" in this State:

When, in 1869, the school law was repealed, we then prophesied that it would be a long time before the State of Tennessee enjoyed the benefits of an efficient school system. The eventful years of '70 and '71 have passed away, and nothing scarcely has been done to build up common schools or increase the intelligence of the people. Free schools have been actually legislated out of the State. The school houses have been virtually closed and the children doomed to suffer all the ills that ignorance is heir to.

We are now standing in the threshold of the New Year, 1872. The educational outlook is dark and unpropitious. Nothing inviting appears to gladden the hearts of the children or encourage the friends of popular education. The desolate school house casts its long and doleful shadow over the prospect before us. The school book has been closed against the children, and the teacher ordered from the great State of Tennessee.

What does all this mean? There is a grand lesson in it, if we can only read it aright. No school law! No school system! No school books! What signs of promise have we for the future prosperity of the State?

Public opinion is, apparently, fast settling down against the establishment of free schools in the State. There is but little hope for young men in this country. Immigration, upon which we depend for population and capital, will be driven to other States. Young men of energy and enterprise will seek homes in the West, where education is free, and intelligence, the basis of all true prosperity, is encour-

aged by the State, and recognized by the people as the only sure foundation of republican institutions.

Our people will see, when it is too late, we fear, that the loss of a school system is the worst calamity that could have befallen the State. Young men may as well begin to cast about them for more congenial homes. This country is not the place any longer for those who wish to rise in the world. The inference we wish to draw from these things is, our young men must seek homes and fields of labor elsewhere.

CURRENT PUBLICATIONS.

THE POSITIVE DIAGNOSIS OF MODERN MEDICINE IN ITS APPLICATION TO THE EDUCATION OF CHILDREN.¹

IT is not our custom to review in these pages medical books, or indeed any professional treatises except those having a direct bearing upon education; and we only make an exception in the present case, because the work before us, though professedly a monograph on "medical thermometry," deals directly in some of its chapters with questions of vital importance to teachers, parents and children. The history of this little volume should be briefly stated in illustration of this. Dr. Edward Seguin, a philanthropist and philosopher, whose rare modesty prevents him from being as widely and favorably known as he should be, has dedicated his whole life to the proper care and training of the young. An accomplished physician, with influence, acquaintance and professional attainments sufficient to have placed him in the first rank of the physicians of the French capital, he voluntarily turned aside from his brilliant future to undertake for the first time in the world's history the training, on philosophical principles, of idiotic and imbecile children. His works on this subject, published at intervals since 1846, are the admiration of the ablest psychologists of Europe and America for their philosophical

¹ MEDICAL THERMOMETRY AND HUMAN TEMPERATURE By Dr. C. A. WUNDERLICH and EDWARD SEGUIN, M.D. New York: W. Wood & Co. 1872.

method and their masterly grasp of the great principles which underlie the development of the human intellect. But Dr. Seguin was no mere theorist. He had practised long and carefully what he taught; with what success, let the numerous Institutions for the care of Idiotic and Feeble-minded Children in the United States, Gréat Britain, France Germany and Italy, all of which avow their obligations to him, directly or indirectly, testify. In the development of these principles he was led to discern their application to children of ordinary and of extraordinary mental endowments, and has thus worked out, step by step, a "system of physiological education" (not education in physiology, but education by physiological methods), which is destined to be his greatest gift to the world.

While engaged in the development of this system in the scant leisure afforded by his professional labors, he has found the "positive diagnosis," as it is termed by physicians, the best means of determining the physical condition of the child, as indicating with absolute certainty how much of intellectual labor he can bear without peril to health, physical development, and even life itself. The thermometer, and especially the medical thermometer invented by Dr. Seguin, which makes the temperature of perfect health its zero, is one of the most important, indeed *the* indispensable instrument of the positive diagnosis, and is recognized as such by the medical profession very generally, and its use is so simple as to be acquired by any person of intelligence in a few minutes, at least so far as to determine the healthy or unhealthy condition of child or adult. The monograph of Wunderlich, given here in English, is the result of more than a million observations on Human Temperature in different diseases, made by Professor Wunderlich, (acknowledged to be the ablest of the German physicians,) and his pupils, and the deductions which he has made from this vast array in respect to the variations of temperature in these diseases and their significance. So far the work is entirely professional and of inestimable value to every physician. But Dr. Seguin has added to it a treatise of equal value, and of far wider application, on human temperature and the means of recognition by every intelligent teacher and parent, of

any departures, whether trivial or serious, from the normal standard of health, and the possibility, being thus forewarned, of restoring the health of the child to the healthy standard.

Dr. Seguin's proposition, then, so far as education is concerned, is, to make the thermometer a ruling power in the management of children during the period of growth and education; in other words, to measure their capacity for labor, study, play, etc., and to apportion them according to the tests of vitality furnished by thermometry.

This proposition is founded upon two facts. 1st. In health the human temperature has a *NORME* or standard point, from which it deviates only by small oscillations, like the tides of life, healthy undulations.

2d. In all diseases there are departures from the normal temperature—*up*, marking fever, and *down*, signifying depression; these may be classed as unhealthy, sickly, or mortal fluctuations.

This double or rather triple test of fever, of health, and of depression, reads thus on the scale of the medical thermometer, which is centigrade :

SECTION OF DR. E. SEGUIN'S THERMOMETER.

7°	....No known recovery.
5° to 6°	....Generally death.
4° to 5°	....Almost always fatal.
3.5°	....High fever.
3°	....Considerable fever.
2.5°	....Moderate fever.
1.5°	....Slight fever.
0.	....NORMAL or Health Standard.
.5	....Sub-normal.
1°	....Depression.
2°	....Collapse.
3°	....Algid-collapse.
3.5°	....Total collapse.

Dr. Seguin contends that, if with his thermometer, whose

manœuvre may be so readily learned, a mother, a nurse, or even an intelligent child, can take and record hourly temperatures for the guidance of the absent physician—it would be no difficult task for the manager of a school to study, and foresee the effects of the curriculum upon the health of his pupils, by noting the degree of heat daily marked on the stem of this instrument; and the value and importance of this precaution once recognized, how criminal it would be to devote to death those who, trying to master an art or science, graduate in reality for the next world.

But it is best to let Dr. Seguin speak for himself.

During the years children go through their school education, they have to grow too; so willeth Nature. One of the effects of this transitory function of growth is to throw a great disturbance upon the ordinary functions; the more since, by a constant interstitial accretion of neoplasm and new cells, every part changes its actual, and all parts their relative positions in each organ as well as in the whole body. Some children die in this body-quake, and more come out of it bent or crippled, never to rise again in beauty and capacity. But what of those who, meanwhile, have to pass through the ordeal of stupendous studies or stupid immobilities?

They are superintended and taught by doctors in all the faculties, but they have not yet seen the one whose duty it is to be “keeper of the ledger of their vital resources.”

Out of the multitude of symptoms which warn against the degeneration of organs and the exaggeration or decline of functions, in children under training, I will suggest: the daily elevation of general temperature during the latest hours of study; and the following irregularities in the distribution of local temperature—as per surface thermometer. Extremities cold and body too hot. General coldness, with either dry heat in the palm of the hands, or a cold and abundant moisture of the whole hand. The same general coldness with parched and peeling lips, and inordinate thirst; or localized heats signalized by a flush on one cheek, oftener on one ear, not always on the same; or an over or unequal temperature on the two temporal regions, marked by a deeper blueness of their venous arborescence. The hand-thermometer and the sight admonish of these dangerous anomalies; the fever and surface thermometer measure them, and also the pyrogenetic action of the elements which enter into the school life.

The body development of the youth is accomplished by oscillations, zoological seasons, corresponding, if not in times, in operations at least, with those which regulate the development of vegetables. In one of the springs of these physiological years of children, some of them will undergo remarkable changes, of which note the following:

Some feel all the uneasiness attending growth, and yet they do not grow; but symptoms which cannot be synthesized under the name of a particular sickness lurk about their frame—mark their anorexy and dirt-gray skin. If this state is not closely watched by thermometry, and treated by revolutionary changes of climate, training, food, etc., a secondary fever supervenes, which carries off the child; or receding, leaves bare to view a constitutional affection: this process of “degeneration of the system,” affects particularly the nervous, lymphatic, and osseous.

In another case the child looks above his fellows in amplitude, freshness, and rich curves; he is amiable though irritable, kind, and studious; but has oftener become tired than can be accounted for. The danger is of a "degenerescence of apparatus"—of the locomotion, for instance. Whoever has followed with wonder the hasty spring growth of the elder-sprouts, and seen one of them suddenly dry up pithless amidst its sappy fellows, can form an idea of this "degenerescence of special organs," by localized deficiency of nutrition.

This form of "localized arrest of nutrition," is always unilateral, a character which permits us to detect it early, by the comparative use, on both sides, of the instruments of positive diagnosis: of the surface thermometer, which will detect a coolness of half a degree and upward on the suspected side, long before any other sign of the affection can be otherwise described; of accurate measurements which will spy the difference of size of the limbs; of electricity and æsthesiometry, delicate tests of tactile sensibility; of the dynamometer which gives mathematical evidences of difference of contractility located in the hands and arms; and of the dynamometric swing, excellent test of that of the lower limbs.

The gravest affections of the nervous system, central and peripheric, visit the young student in proportion, it seems, to the severity of his training; and are almost unknown among the young vagabonds and street boys. I intentionally choose these two extremes to show what nutrition is, and what non-nutrition can produce. The college children are better fed than the abandoned children; yet they receive less nutrition from their food because they spend in mental and other exercises more of the *pabulum vitæ* than their food—supposing it the best—could afford. To show that this bankruptcy of nutrition, by inordinate expenditure of the pabulum, is the cause to which we must refer the majority of the nervous affections I have in view, and their reactions on the rest of the economy, I will take, for illustration, one too frequent and too fatal among young scholars—meningitis.

It is in its various forms as complex as the etiology of these forms. However, from the baby who ceases to be nourished, though he is fed, the moment his nurse becomes pregnant, from the child overpowered by heat, and the student by his studies; that the subject be not nourished enough, or spend too much of their nutrition in mental or other exercises—the multiform affection—under the symptomatic name of "cerebral fever" (Trousseau)—may be referred to an insufficiency of the vital properties of the blood, and its causes synthesized in "deficiency of nutrition"—of whatever origin, of course.

HUSBANDING THE VITAL FORCES.

For there are more ways than one to "starvation." When we spend more than we can assimilate of forces expressed by calorificity, as in the previous example of the school and vagrant boys; when the blood is not well oxygenated, nor rich in red corpuscles; whenever it does not penetrate all the tissues by circulation and endosmosis; whenever its serum lags behind in its primary form, or in that of lymph, pus, effused fluids, whether surrounding or not miliary and tuberculous deposits, there is "deficiency of nutrition."

And as there is a general and a local circulation, there are local as well as general starvations, caused by the devitalized elements of the blood remaining behind in certain localities. If it is cruor, it produces gangrene, dry-rot, etc.; if it is serum, it produces dropsies, tubercular affections, etc. A continuous congestive state (orgasm) disposes to a separation of the components of the blood, and to their

transformation into secondary products, as much as a prolonged scantiness (anæmia); hence the unrelenting attention exacted from young students makes their meninges the particular seat of vascular congestion, which cannot fail, sooner or later, to end in thickenings and protean formations, which devote the school-laureate to vulgar incapacity, imbecility, or death.

The teacher must know that all the operations exacted from a child—actions, perceptions, emotions, imaginations, thoughts, and volitions—are the direct, reflex, or converted products of sensory and cephalic movements, manifestations of a "force."

This "neurine" force is "fed and spent, never lost," but "converted" into labor or "wasted" in shocks and frictions. In regard to this neurine force, those who assume the charge of the youth "will" have twofold duties: one, to direct its usage through the muscles, senses, and mind, so that they could produce the most valuable labor with the least friction or shock; the other, to keep a constant equilibrium between the forces incoming and those going out. But this duty includes a third, more important than both: it consists in husbanding the nervous and correlating forces, so that the children will have enough, not only to spend in labor, in growth, and in necessary repairs of their organism, but always enough in store to spare for an emergency, like extra-work, exposure, disease, surgical accidents, etc. This investment, managed by the true manager of a school, is the real insurance of life and of future capacity; without it, the existence or welfare of children are never secure.

Therefore, not content with having ascertained their condition at the beginning of each course, he must continue to record their vital signs and the working of their functions periodically for all of them, and more frequently for those whose condition is suspicious. The general thermometer will detect fluctuations (more than diurnal oscillations) in a child too much confined; the local thermometer will descry a line of fever-heat at the base of the forehead in another who over-taxes his memory; the sphygmograph will trace the jerked pulse of one who has been running or boating to excess, or an intermittent one for more secret reasons; the spirometer will show a loss of inspiration which corresponds with a loss of circumference, or with a lateral depression in the chest, as per tape-measure and lead circle; and the dynamometer will mark a weaker contractility otherwise suspected by the circular measurement of the arm and from the loss of body weight, etc., in the young one's crouching for hours over books.

This positive knowledge of the organic and functional condition of each child once acquired and steadily kept up, like a commercial account, let the programme of instruction, or even the plan of general training be what they may—dictated for some years yet by pride and love of the useless—the man in charge of children must, in any circumstance, manage them upon this physiological basis:

Every animal is a producer of heat, and correspondingly a consumer, too.

He must produce enough of it to live, to grow, to repair its constituent elements, and to move towards its ends, whether man, child, bird, or buffalo. (*See Comparative Table of Temperatures in the Volume under review.*)

The degree of normal production of temperature is the measure of the physiological capacity for action, *alias* latent force.

The first duty of the teacher is to see that there is no useless consumption of this latent force by friction, shocks, etc., as may be ascertained by thermometry.

The second is to supply this force by sufficient food, exercise, aëration, and insolation.

The third is to consume this power in preparing the child for the most useful and congenial modes of activity.

At work—at school or in the fields—the child consumes the organic materials of his blood.

This "ustion" is the *sine qua non* condition of labor.

The thermometers are the "meters" of this local or general ustion, and therefore the index of the capacity of each child for labor.

I most respectfully call the attention of the otherwise so learned and capable superintendents of schools and seminaries towards these principles, the bases of the physiological conditions in which the children must be kept during the entire time, and at the different periods of their tuition and growth.

This must be the object of the earliest reform. The man who understands best the pyrogenic conditions during labor must be the teacher, not only of the pupils, but of the teachers; and will cause to be written in each school-room—but in words invisible for the young: THE CURRICULUM IS MADE FOR THE CHILDREN, NOT THE CHILDREN FOR THE CURRICULUM.

Finally, Dr. Seguin urges again the application to practical education of the tests offered by thermometry and by other means of positive diagnosis, to keep constantly the balance of vitality in favor of the students, thereby improving their beauty and capacity, and soon the æsthetic, social, and working qualities of the race.

Then, reminding his medical brethren that the best as well as the first of teachers is the mother, Dr. Seguin enters into minute and careful details for her instruction in the art of thermometrical observation, and advising his brother physicians to instruct her in it, he concludes:—

"Make her love, study, and trust the little magician, which, like the little finger in the fairy tale, tells things that nobody can know otherwise. With it she will give us a trusty account of the condition of her patients. During our absence, her hand will be our hand, her eye our eye; and more, seeing a sudden rise or fall of temperature when we are away, she foresees the peril that thermometry predicts several hours in advance, as the barometer does the storm; her mind becomes our mind, she hastens our return, giving us a chance to ward off a deadly exacerbation or collapse; truly herself saving the life of the patient and eventually our own reputation.

Therefore let us educate women in the arts secondary to ours, and particularly in the handling, recording, and intelligently reading of the operations of the medical thermometers. And when the hours of family trials and of heavy professional responsibilities come, when zymotic or contagious diseases invade the home circle, we have by our side the faithful woman. Neighbors, quacks, and mediums proffer in vain their nostrums; she stands by her thermometer, knowing that a calm and correct record of a day's fever brings more hopes and is a better foundation for a cure than a dishevelled therapeusis.

Less solemn, but not less useful, is the prophylactic home-use of the medical thermometers. I can only give one instance of it: when parents are preparing for an absence, the husband looks at his weather-thermometer to provide extra coverings against the rigors of external temperature, and the mother looks to her medical thermometer, to make sure that she does not leave behind her, ignored, a

bodily temperature foreboding sickness to one of the children, in the next twenty or forty hours.

We think our readers will agree with us that there is a deep importance and significance in these suggestions, and we cannot but hope that all teachers will heed them, and thereby save a multitude of youths from the great evils which threaten them.

THE PARSEER'S MANUAL,² embraces classified examples in nearly every variety of English construction, and will serve as an excellent companion volume to any of the English grammars. It is impracticable to introduce into the school grammars the drill exercises necessary to make learners familiar with the parsing and analysis of all kinds of sentences—hence Mr. John Williams prepared this volume, and hence we commend it.

PINNEO'S GUIDE TO COMPOSITION,³ is a series of practical lessons designed to simplify the Art of Writing Composition. The author's plan is to gently lead the pupil along step by step, until he is actually taught to write composition before he is aware of it, and even before the usually repulsive word "Composition" is used. With the skillful use of this little book there is no reason why the youngest learner may not be taught to express his thoughts readily, in a "correct, clear, forcible and easy style."

MESSRS. SHELDON & Co., have become the publishers of "Colton's Series of Geographies." The "Series" is sensible; for it has but *two* books, and these two will give the children more geography than some of the more pretentious series of four, five or six books. The maps are new and good.

MESSRS. CHARLES SCRIBNER & Co., have recently published "Wilfrid Cumbermede, an Autobiographical Story," by GEORGE MACDONALD. 498 pages, and fourteen full-page illustrations. The press is very highly commending it. To their "Illustrated Library of Wonders" they add "The Wonders of Vegetation," from the French of Fulgence Marion. Edited by SCHELE DE VERE. The volume has 61 illustrations.

MESSRS. DODD & MEAD are active, having added to their already quite extensive list, "The Sciences of Nature *versus* The Science of Man," by NOAH PORTER. "A Comparative History of Religions," by JAMES C. MOFFAT. "The Theology of the New Testament," by J. J. VAN OSTERZEE, from the Dutch, by Maurice J. Evans; and another of the August Stories, entitled "Hunter and Tom," by JACOB ABBOTT.

MESSRS. HARPER & BROTHERS' recent standard publications are unusually numerous and excellent. Among them we find "Physiology of the Soul and Instinct, as distinguished from Materialism," with supplementary demonstrations of the Divine communication of the narratives of creation and the flood, by MARTYN PAINE. This scholarly work contains 707 pages, with a good portrait of Dr. Paine, the author.—"The Life and Times of the Rev. John Wesley, M. A., founder of the Methodists," by L. TYERMAN. Vol. I., 564 pages, with portrait from an engraving published in 1743. The work is to be completed in three volumes.—"Character," by SAMUEL SMILES, 387 pages. "Shakespeare's History of King Henry the Eighth," edited, with notes, by WILLIAM J. ROLFE. 210 pages, with illustrations.—JACOB ABBOTT adds to the series of "Science for the Young" a new volume entitled "Water and Land." It has 330 pages, with numerous illustrations.—"Gentle Measures in the Management and Training of the Young," exhibiting the principles on which a firm parental authority may be established and maintained, without violence or anger, and the right development of the moral and mental capacities be promoted by methods in harmony with the structure of the characteristics of the juvenile mind, by JACOB ABBOTT. 330 pages, with illustrations.—"Woman's Worth and Worthlessness," being the compliment to "A New Atmosphere," by GAIL HAMILTON. 292 pages.—"The Land of Desolation," being a personal narrative of observation and adventure in Greenland, by ISAAC I. HAYES. 358 pages, illustrated.—"Round the World," including a residence in Victoria, and a journey across North America, by A BOY. Edited by Samuel Smiles. 290 pages, with illustrations.—"Reading Without Tears," or a pleasant mode of learning to read, by Author of PEEP OF DAY.—"Border Reminiscences," by RANDOLPH B. MARCY. 396 pages, with illustrations.

MISCELLANEA.

E J. RICE, who left the Eastern field about three years ago, in search of health, has found good health in Colorado, and has founded an Academy at Trinidad, C. T.

J. C. SMITH, Principal of the Iron City College, Pittsburgh, Pa., is doing a notably good work in the "Commercial College" line.

THE newly elected State Superintendent of Public Instruction for Iowa, Mr. Alonzo Abernethy, has just entered upon the duties of his office and appointed Mr. J. W. Stewart, of Fayette, as his deputy. The retiring officer, Hon. A. S. Kissell, goes immediately to Europe on a tour of inspection among the schools of the Continent, especially in reference to the Kinder Garten system of instruction.

CONSTANTIN STAURIDAS, of Anchialos, Greece, has published "A History of the Franco-German War," in modern Greek. The book is written in an extremely plain and clear style, and may be understood by any one who can read the Greek classics. It is especially interesting to read these modern events in a semi-classical garment. Even the Greek orthography of modern names is quite refreshing. *Cremieux* is changed into *Kreme*; *Chassepot* into *Sassepo*, etc. The French newspapers *Debats*, *Temps*, *Siecle*, are respectively called *Syzeteseis*, *Chronos*, *Aion*. The narrative forcibly reminds us of Xenophon and Arrian—so much is still left in modern Greek of the old classical form of expressing thoughts. The book is published in Leipzig, Germany. Modern Greece (alas!) has but very few printing establishments, and the countrymen of Thucydides and Plato must look for the cities of "barbarians" to enable them to read their own modest productions!

PUBLISHERS' DEPARTMENT.

We have received the **Catalogue** of the Mass. Institute of Technology, for 1871-72, containing lists of 34 teachers and 264 students; also programmes of the courses, with a full account of the methods of instruction, and of the Chemical, Physical, and Mining Laboratories, together with plans of the several floors of the Institute Building. We advise all interested to examine this Catalogue.

The Manufacturer and Builder always contains practical information regarding the newest and most useful discoveries and inventions in science and art. Among the articles in the present issue we notice those on "Ready-Made Houses," "International Societies," "New Rotary Drilling-Machine," "The Selden Double-Action Plunger Pump," "Floral Fountains," "Manufacture of Russia Iron," "New Sources of Supply for Paper," "Fallacious Theories of Boiler Explosions," besides many others, all admirably illustrated. Published by the Engineers' and Manufacturers' Publishing Company, 37 Park Row, New York. \$2 a year.

The National Sunday School Teacher for 1872 is "BETTER THAN EVER!" as you will find by sending fifteen cents for a Specimen copy to Adams, Blackmer & Lyon, Pub. Co., Chicago.

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